DOCUMENT RESUME

ED 257 144 CS 504 898

AUTHOR Vaughn, Mina A.
TITLE Symbology Exhibited in Discourse Produced for the Formal Socialization Process in High Technology Industry.
PUB DATE Feb 85
NOTE 32p.; Paper presented at the Annual Meeting of the Western Speech Communication Association (Fresno, CA, February 16-19, 1985).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Business; *Communication Research; Discourse Analysis; *Organizational Communication; *Socialization; Speech Communication; *Symbolic Language; Symbolism; *Technological Advancement; *Values
IDENTIFIERS *Symbology

ABSTRACT

A descriptive, qualitative research design was used in a study that examined the formal socialization process in high technology organizations. The primary objective was to determine if organiations involved in high technology tended to exhibit similar symbology in the discourse produced by management for the formal socialization process. Data were collected from personnel directors and from pamphlets and other publications that reflected the organizational ideology. Similarities that emerged--as reflected in the themes, slogans, general vocabulary, and material symbols--consisted of five primary values: innnovation, quality, teamwork, equality, and individualism. Of these, innovativeness and individualism appeared to be the primary values consistently and frequently associated with organizational claims expressing management's aspirations and stated beliefs about the organizations. Some differences also emerged. For example, some organizations appeared to use different symbols for socializing members, depending on the technological specialization of their products. Others were the result of factors unique to the particular organization being analyzed. (HOD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED257144

SYMBOLOGY EXHIBITED IN DISCOURSE PRODUCED FOR THE FORMAL SOCIALIZATION PROCESS IN HIGH TECHNOLOGY INDUSTRY

Mina A. Vaughn

Paper presented at the Annual Western
Speech Communication Association Conference
Fresno, California
Fall 1985

The author gratefully acknowledges Professor Don Faules for his critical comments and suggestions through this research project.

CS 504 868

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Mina A. Vaughn
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ABSTRACT

This paper examines and describes the symbology exhibited in discourse that is produced for the formal socialization process in nine high technology organizations. Specifically, the researcher wanted to determine if organizations involved in high technology tend to exhibit similar symbology in their socialization processes. Similarities and differences that emerged, as reflected in the values, themes, slogans, general vocabulary and material symbols, are analyzed. Implications that may be useful for future research in organizational communication are discussed.

SYMBOLOGY EXHIBITED IN DISCOURSE PRODUCED FOR THE FORMAL SOCIALIZATION PROCESS IN HIGH TECHNOLOGY INDUSTRY

The purpose of this paper is to describe the symbology exhibited in discourse produced for the formal socialization process in high technology industry. Specifically, I wish to determine if organizations involved in high technology tend to exhibit similar symbology in their formal socialization processes. Many communication scholars interested in the study of organizational cultures appear to have reached some consensus that the socialization process has a dynamic influence on cultures. To this researcher then, such an assumption suggests that exploring the nature of the specificity of the process across various types of organizations may be a useful research endeavor.

The socialization process, according to Van Maanen and Schein, refers to how an individual learns appropriate and acceptable behaviors, as well as those that are not desirable, in an organizational setting; a cultural perspective that provides "conventional wisdom" to the organizational members.[1] In order for new members to adjust to an organization's value system and develop behavioral patterns that are deemed essential for acceptance into a particular organization, they need to experience an orienting process. Organizational socialization provides that experience.

Despite the theoretical research that appears to support the importance of the formal socialization process,[2] the literature is lacking in applied research. A review of several recent communication publications yielded a preponderance of theoretical pieces, with few studies using actual data as evidence for their arguments.[3] Katz, Kahn and Stacey argue that certain fields of investigation can tolerate such gaps, but organizational communication cannot. They claim that we must operationalize concepts in the field through interaction between research and practice and the application of knowledge or theory.[4]

Within the field of organizational communication, the culture metaphor has, in the last few years, received noticeable attention from scholars. It, along with other metaphors, helps researchers develop a framework for analysis in that it serves to generate an image which can provide the basis for systematic research.[5] The concept of culture, however, is used in a variety of ways. In her article, "Concepts of Culture and Organizational Analysis," Smircich describes five different programs of research that have emerged from linking organizations and cultures.[6] Her explication of the research agenda from each of the perspectives suggests different and interesting directions that researchers may pursue. For the purpose of this paper, however, the program of inquiry that conceives of culture as a pattern of symbolic discourse, which involves a system of symbols and meanings that are shared by members of an organization, appears to be the most useful one.[7]

Researchers who apply the symbolic perspective to organizations are interested in interpreting how an organization is created and maintained through symbolic discourse. All metaphorical concepts involve some form of symbolic process; the agreement that one thing can stand for another. The culture metaphor from the symbolic perspective, however, focuses specifically on the symbology of organizational life.

A symbol can be described as an instrument used by people to codify their experiences or create a map of the territory. Symbols are ambiguous and stand for a multiplicity of meanings, meanings which are ascribed by human beings and bestowed on them by agreement or convention. Researchers have looked at the relationship between symbology in organizations and organizational change,[8] organizational commitment,[9] and organizational dynamism and uniqueness.[10] Other writers have found that the symbology exhibited in myths,[11], stories,[12] and relevant constructs,[13] can be analyzed to provide a basis for describing organizations by getting at the "unconscious feelings, images and values that are inherent in that organization and enacted by its members."[14]

Scant attention, however, has been given to describing symbology exhibited in the formal socialization process and how that impacts on the culture of an organization, particularly in high technology industry. High technology industry exemplifies the new information-based society, that has shifted beyond the Industrial Revolution. This shift is accompanied by radical changes in organizational systems, as continuous process tech-

nology places a premium on decentralization and integration.[15] Technical methods, duties and powers are no longer so precisely defined in these settings; the environment is unstable and changes rapidly.

If operations and working behaviors are not governed by "someone at the top" with all of the organizational knowledge available only to the head of the firm, how do newcomers come to learn the ideology of a particular organization? How does an organization shape an individual's behavior to its needs when the control system is diffused within the everyday work situation? How does he or she develop an understanding of the cultural plan that is compatible with the expectations of the other parties in the organizational relationship?[16] And how is this understanding maintained?

Research indicates that the formal socialization process has a critical effect on members' adaptation to the culture of an organization, as it gives newcomers their first clues about the basic social knowledge that is required for participating as an organizational member.[17] For management, the formal socialization process is critical since it involves the construction (and later, the maintenance) of systems of shared meanings within the organization. A descriptive study in this area may, then, contribute some insights into how the symbology exhibited in this process helps define the culture in a unique organizational environment; high technology industry.

In the following section of this paper, the organizational settings and the procedure for collecting the data will be des-

cribed. The next section will provide an analysis of the data from the nine organizations. The final sections will discuss the tentative findings of this exploratory study and address some implications that may be of interest for future research.

Method

Organizational Settings

The purpose of this study was to examine the formal socialization process in high technology organizations. The primary objective was to determine if organizations involved in high technology tends to exhibit similar symbology in the discourse produced by management for the formal socialization process. A descriptive, qualitative research design was utilized to analyze the data collected from nine high technology organizations: Med Tech, Wilson Research, Piermont, J-Systems, Roseland Associates, Computech, BDS Semiconductor, Aerovac and Dixon Defense (The names of the organizations have been fictionalized.) These organizations exemplify the fast-changing and unpredictable environments associated with high technology industry. They have experienced rapid growth and are involved in extensive research and development programs. These characteristics typify descriptions of high technology companies.

The organizations in the study represent many different types of high technology effort. Their products vary from an instrument carried by the blood into the heart for measuring the amount of blood the heart pumps, to a graphite canister used to launch the intercontinental ballistic missile, Peacekeeper. The

term, "high technology," as used here, then, is a generic trademark for the application of state-of-the-art, cutting edge technology to almost any industrial product. The companies employ from 45 to 340,000 employees.

Collection of Data

The researcher requested an interview with the Personnel Director or Director of Human Resources because the person who does the hiring occupies a pivotal position within the organization. He or she not only has the first and final decision filling many of the jobs, but is in the strategic position to be the first to communicate organizational goals. Research indicates that a newcomer's early experiences help to determine how that person comes to understand his or her expected behavior and has a potent effect on how later experiences will be interpreted.[18] By articulating a particular version of events, the person who does the hiring can influence how new members perceive what is happening in the cultural setting.[19]

Interviews were chosen as a source of data because they have many advantages which some other data gathering procedures do not. They offer the researcher an opportunity for making clarifications that are not available when interpreting data from written sources. Another advantage of personal interviews is that they allow the researcher to observe nonverbal communication.

Each interview lasted from one to two hours and tended to be very informal. The interviewer encouraged the interviewee to talk as much as possible by mirroring and general reinforce-

ment.[21] The following are examples of some of the open-ended questions the interviewer asked in the face-to-face interviews.

(1) What is the history of your organization?
(2) How would you characterize the people that work here, and how do they get ahead?
(3) Why is your company a success?
(4) How is your organization different from or similar to other organizations involved in high technology?
(5) How do you recruit new members into your organization?
(6) What kind of a formal orientation program do you have?

At the close of each interview, the interviewer asked for documents, which are authoritative messages in that they are created by individuals who speak for the organization.[22] These documents included annual reports, newsletters, training manuals, employee handbooks, orientation procedures, recruitment phamplets and other publications that are presumed to reflect the organizational ideology. Bantz argues that documents can be valuable in understanding organizational cultures if they are weighed and evaluated by the researcher. He suggests:

> . . . they are useful indicators of the internal rhetoric of the organization, and . . . they provide an alternative for placing too much trust in verbal interaction as a source of organizational reality.[23]

The interviews and documents were examined in order to discover and describe the symbology revealed in the organization's language. As an integral part of the socialization process, both kinds of data provided a variety of information about the cultural artifacts within the organizations.

Analysis of Data

A critical analysis was utilized to examine the interview and document data gathered for this study. This appeared to be

a useful approach as the purpose was to describe the symbology exhibited in the formal socialization process in the nine organizations and determine if they shared common symbology. Specifically, the researcher identified the primary values that emerged. Since values consists of both norms (expected behavior) and ideals (standards of behavior), they represent criteria or standards for accepting one behavior over another.[24] Further, one may assume that in the formal socialization process, management communicates the most important values to organizational members to influence them toward preferable modes of behavior.[25]

Themes, which are topics or subjects that occur repeatedly and provide continuity, and master symbols,[26] which evolve from persistent values and themes, were analyzed in terms of the support they gave the values. Slogans and general vocabulary , which are linquistic symbols that communicate organizational values were examined, as were material symbols, which are objects that help define the important characteristics of an organization. The remainder of this section follows the scheme of presentation described above.

Innovation

Innovation was one of the overriding values that emerged in nearly all of the organizational data. Whether expressed in themes relating to individual actions, products, or problem-solving, the value of innovation was used to symbolize management's norms and ideals relating to members' behavior.

Innovative individuals were described as being creative and inventive; both requisites for achieving individual, as well as,

organizational success. For example, Wilson Research claimed innovativeness as an ideal for "getting ahead in the company," and Roseland Associates informed its members that "if you can find a better way to get the job done . . . your promotional possibilities are increased." At J-Systems the value of innovativeness was reinforced by the "Suggester-of-the-Year-Award," a material symbol that was awarded to an organizational member who had suggested "the most creative idea for the past twelve months." Other material symbols, such as the "Invention Achievement Award" at Computech, suggested that management valued innovation.

Organizations' stories of their early beginnings, which appeared to have become reifed as part of the organizational cultures, communicated innovativeness as a primary value, particularly in describing the individuals that were given credit for the companies' early successes. For example, Mr. Johnson, the Director of Human resources at Piermont, talked at length about the organization's founders, particularly Mr. Jensen, who was a member of a research and development project that designed a temperature sensor for jet aircraft. When the group could not find anyone to build it, Mr. Jensen, and a couple of other men, left the project to take on the taks. According to Mr. Johnson:

> These remarkably creative individuals rented a chicken coop and started to build. They'd go across the street to the Texaco station to use the air hose to blow out the parts as they were building it. . . . Robert Jensen was very creative and innovative, a very entreprenerial individual.

References to Mr. Jensen and the chicken coop emerged thematically in the written documents and were always associated

with innovativeness, and other related values, such as creativity and initiative. The fact is the organization had its start in a building that had originally been a chicken hatchery, but the owners had remodeled it into three apartment units by the time the company set up its operations. That the frequently told story was not exactly true was less important than the function it served. Like many of the organizational stories, this one served to dramatize some of the organization's stated basic beliefs and symbolically expressed important values and themes.

Innnovativeness was expressed as a value in organizations that symbolized product as the yardstick by which to measure organizational success, as well. Although the organizations reflected a diversity of products, seven of them expressed the belief that the creative and innovative aspects of their products placed them in the forefront of technological advancement and symbolized their success in a competitive field. For instance, BDS Semiconductor used one of its microprocessor chips on the cover of the recruitment phamplet as a material symbol of its success but said, "To get where we are, we had to attract 40,000 of the most ambitious, inventive people on earth." In the Annual Report, Computech claimed to have earned twenty-five patents and introduced fifty-three new products in the preceding year. Though unstated, "how people innovate" made a value statement about the kinds of behavior that help this organization in its "pursuit of excellence."

Interestingly, some interviewees claimed that innovativeness was unique within their companies and made them different from other high technology organizations, while others claimed that innovativeness was the unique factor in high technology industry, in general. All agreed, however, that innovation contributed to their organizational success. The written documents tended to substantiate the broader claim; that management believes innovation to be an important part of the process that will continue to provide a technological edge in a highly competitive field.

Quality

Competing for success was a persistent theme in nearly all of the organizations, and in addition to innovativeness, the value of quality, as it related to competitive success, surfaced repeatedly. Many of the organizations had slogan-like statements, such as "Quality Quiets the Competition," that were most noticeably expressed in the newsletters and employee handbooks. Rosela i Associates whose slogan "Targeting for the Top," was defined in terms of "achieving profitable success through quality products," also claimed that "our engineering philosophy is based on one word. Quality." Aerovac evoked quality as a "God-term"[27] in its newsletter by listing a set of working guidelines and labeling them, "Ten Commandments for Quality Production." Interviewees claimed, in some instances, that quality symbolized success. Mr. Chase, at J-Systems explained:

> I think it's erroneous to suppose success always comes because of good leadership. . . . Success is having quality products, at the right time, in the right market place.

In the five organizations (Piermont, J-Systems, Roseland Associates, Aerovac and Dixon Defense) that are involved in defense technology, a theme that centered around plant security dramatized the value of quality production. In all of the employee handbooks, members are told that it is their personal responsibility to safeguard sensitive and confidential information about such matters as procedures, specification, and types of material used in manufacturing the products. The Roseland Employee Handbook informs newcomers that:

> Our job security and profit sharing are dependent on quality products, some of which are not protected by patents or copyrights. You are expected to safeguard sensitive information. Security at Roseland is everybody's business.

In the Annual report from J-Systems, security is so closely associated with quality production that the products themselves cannot be disclosed:

> Because of their classified nature, there can be no simplistic listing of systems that have been, or systems that are being developed in our company . . . . The nature of our business precludes providing detailed information.

The reader is informed, however, that the company takes pride in its ability to develop the most advanced electronic systems that are "required to help insure our nation's security by maintaining our military preparedness throughout the free world."

The orientation film presented at Aerovac expressed to newcomers that security was directly related to the organization's success in quality production, but safety was of greater importance. The company's slogan-like theme, "At Aerovac, safety is more than a slogan," evoked guidelines for how members

should go about accomplishing their organizational tasks. The extensive safety program appeared to serve as a master symbol that provided the means by which each person can engage in producing quality goods to ensure both individual and organizational success.

In the examples above, both security and safety are indirect symbols for quality, and appear to be directly tied to the goals and objectives of the particular organizations. Aerovac produces explosives, as well as defense products, and the interviewee said that safety is a number one priority because "we just can't have accidents here. Too many people would be killed." J-Systems, however, is regulated by national security procedures and must establish certain rules to meet those standards that will enable them to compete in manufacturing quality products. While all of the organizations produced discourse to socialize members with respect to the kinds of behaviors and actions that are desirable for producing quality goods, they appeared to use different symbols to convey the knowledge for how that goal may be accomplished.

Teamwork

Teamwork, as a symbol for conceptualizing managerial philosophy about the value of unity and shared responsibility, emerged frequently and consistently in interviews and documents, along with the values discussed above. Stories with themes that centered around how work tasks were accomplished through teamwork were related by several interviewees. At Piermont, Mr. Johnson reported how members had "agreeably worked together long

and hard hours to fulfill an order that needed to be delivered before the customer's annual plant shutdown," and at Roseland Associates, the Personnel Director recounted a story that reinforced the value of working together to attain mutual goals:

> We had a lot of boxes of products in the shipping area and a major water line broke out there. We had several people that came to the emergency situation and worked straight through the night . . . . They encouraged other employees to pitch in and that was just so spectacular of them that we made a lot of it.

The interviewee said the people were later rewarded with a dinner out because "they had volunteered and really saved the day." He said, "You know you can't always create that spark in others, but you can kill it if you don't jump on the opportunity."

All of the recruitment booklets included statements about the value of team effort. At Dixon Defense, management claimed the recruit should consider a job with their company, because they understood that he or she felt it's time to "make a mark in your field . . . and to establish yourself as an innovative individual and valuable team member." Often teamwork statements appeared in brief narratives written by organizational members who had been selected to symbolize the kinds of employees valued by the organization. Statements, such as "Knowing that I'm a part of a decision-making team is important to me" illustrate how management, in some instances, used organizational members credibility to communicate organizational ideology.[28]

In addition to the recruitment booklets, other documents included assertions about the value of working together as a team, particularly the newsletters. In one issue from BDS Semiconductor, one upper management level employee said that his

area "is committed to a philosophy in which problems are made to be solved through teamwork." Several issues had articles about particular divisions who, through teamwork, had made outstanding contributions in areas such as productivity and quality performance. J-Systems, who designs and produces precision temperature and pressure measuring instruments, devoted two pages of their newsletter to the Greenville Division which received the Corporate Division of the Year Award. The value of teamwork was explicitly expressed by the Senior Engineering Manager:

> Team-playing receives heavy emphasis among our group. Through the team concept, we can maintain and constantly improve on an intimate relationship with quality control and high performance.

In addition to the article, there was a picture of a Senior Vice-President presenting the award to the divisional members. The participation of the company's officer in the event and the presentation of a material object reinforced management's claims about the importance of teamwork. At J-Systems, and other organizations, teamwork emerged as a master symbol, as it generated an identifiable and easily understood image capable of illuminating goals and objectives to organizational members.[29]

Equality

The organizations also stressed the value of equality when describing the norms and ideals associated with teaching organizational goals. Many of the interviewees explicitly stated that equality was a characteristic of high technology industry and suggested that, in many cases, it could be traced back to the organization's beginning, when a handful of people had a great idea and very little money, and getting the job done meant doing

all of the jobs. The interviewee at Med Tech which developed and is marketing hyperthermia systems for the treatment of cancer, said, "Our company was never founded on a 'we-they' concept, and it's never been run that way. I think that's characteristic of many companies in the industry."

Other interviewees claimed that the strong value they placed on equality was unique to their company, and they talked about it with special pride. In any case, all of the interviewees were able to give examples to illustrate equality in their organizations. Some of the examples centered around material symbols, such as the one related by the Human Resource Director at Piermont:

> For example, after ten years you get a parking space with your name on it. Now, we've got some vice-presidents who don't have a parking space. They walk in from the back lot, but we've got some technicians and secretaries who are right on the front row. The point is, everyone is treated the same here.

Absence of an executive dining room, profit sharing plans and other benefits, such as educational opportunities for all employees regardless of position, were some of the themes that emerged frequently when interviewees talked about equality. Some interviewees claimed the general vocabulary of the organizations symbolized equality; "Everybody is on a first name basis here." In the newsletters from Wilson Research, the President consistently used the pronoun "we" in his monthly letter to the employees as a symbol of equality.

Documents from other organizations supported the interviewees' claims that equality was a primary value. For example, all of the employee handbooks communicated open door policies as a part of managerial philosophy, but differences surfaced when defining what that meant even within a single document. In the Employee Handbook from Computech, in his message to the members, the Chairman of the Board said, "Every door is always open . ." but under "Employee Problem Solving," newcomers are told that normally problems can be resolved by "discussing them with your supervisor."

Many slogan-like statements about the value of equality emerged in most of the recruitment booklets, but they did not include details other than stating that the organizations adhered to a policy of equal opportunity. In these instances, it was difficult to determine whether claims about equality were organizational rhetoric or a correct description of organizational facts. In either case, equality, as an expressed value, emerged frequently in the discourse produced by management as part of the socialization process.

Individualism

The data from all of the organizations included references that related to the value of individualism. The references, however, symbolized two different managerial philosophies. From one perspective, the emphasis was on respect for the individual in terms of being treated with dignity and achieving personal satisfaction and self-fulfillment in the organizational setting.

For example, in the recruitment booklet from Aerovac, management claimed that two questions are uppermost in the minds of potential recruits: "Will I be treated as an individual? Will I have the opportunity to grow, both personally and professionally?" This organization argued that such questions were pertinent in a society that focuses on individual achievement and fulfillment of ambitions through one's own efforts. Other rhetoric in "respect for the individual" themes supported the claims with evidence that also supported the value of equality. BDS Semiconductor, for instance, discussed equal access to employment and equal consideration for advancement, as examples of respecting people as individuals. Similarly, Computech claimed a policy of promotion from within with advancement based on merit and not seniority as "expressions of our concern for the individual."

The other philosophical perspective was directed more toward the concept of individuals as it relates to a principle of independent action. Management claimed that members had a basic need to be treated as individuals with a capacity for self-determination. In the "Human Resource Philosophy" statement from Piermont, for example, management stated:

> Employees have the desire and capacity to exercise appropriately delegated areas of responsibility. Central to the exercise of delegated responsibility is the freedom to act and make decsions with the corresponding freedom to make mistakes and be responsible for them in the process.

As in other instances, management sometimes used organizational members as a spokesperson to express their view. A five-year employee from J-Systems was pictured in the recruitment booklet and quoted as saying, "I really like my job here because I have a lot of opportunity to do my own thing." Slogans such as, "Each individual has the right to know the significance of what he is doing," reinforced organizational claims that management valued the individual.

Computech and Dixon Defense, the two largest companies in the study, appeared to place more emphasis on individualism as a primary value than did the other organizations. Computech claimed its success was based on adhering to three fundamental beliefs and that respect for the individual was the most important. One of the recruitment booklets from this organization explicitly stated that the policies and practices based on the belief mitigated the size disadvantage without destroying the benefits. "Individual," and related words appeared nineteen times in a relatively short text. At Dixon Defense, individualism was explicitly stated as a value in the interview, as well as in the documents. In the Employee Handbook, for example, newcomers are informed that management recognizes the need for individual development and "it is as important to us, as to you, because it contributes to the company's ability to operate profitably."

Interestingly, the value of the individual was communicated less often in the data from Med Tech, the smallest company in

the study, than in any of the other organizations. The interviewee claimed that "creative individuals" contributed to the company's success, but the three documents included in the data base did not mention individualism, nor any derivatives of the word.

The value of individualism was implicitly reinforced in some of the organizational events. The interviewee at Wilson Research described an organizational ritual of presenting an "Awareness Award" to an employee who had "saved the day" in some way. He described how three officers of the company and a photographer approached an employee on the job to present her with a check and a handshake. A picture was taken to be made into a large poster. He said, "It's amazing how receptive people are to a little thing. You don't need to do a helluva lot."

These rituals dramatize managerial claims about the value of individualism and provide the members an opportunity to share in the dramatization. Additionally, they serve as indicators that personal achievement is desirable and reinforce organizational claims that individualism is an important part of the organization's culture.

Discussion

The researcher was interested in discovering and describing the symbols within the nine organizations as they manifested themselves in the discourse produced for the formal socialization process and to determine if organizations involved in high technology tended to exhibit similar symbology. The results of

this study suggest that there may be common symboling among organizations involved in high technology industry. Five primary values emerged: innovation, quality, teamwork, equality and individualism. The analysis of the data indicated that these values may function interdependently, to some degree, to communicate managerial philosophy, beliefs about process for accomplishing tasks, the rationale for decision-making policy and other information that will socialize new members to align themselves with organizational goals and objectives. Pfeiffer argues that it is a critical managerial activity to construct and maintain belief systems which "assure continued compliance, commitment and positive effect on the part of the participants."[30]

Though more similarities in the organizational symbolic discourse emerged, there were some differences. For example, as mentioned earlier, some organizations appeared to use different symbols for socializing members depending on the technological specialization of their products. Many research studies indicate that technology is more important that other variables, because technology imposes demands on management information processing and other areas of the organizational structure that creates and maintains the culture of a particular organization.[31] In high technology terminal values may be shared, but instrumental values, in some instances, may differ between organizations producing missiles and those producing medical or computer products.[32]

Many of the differences appeared, however, to be a result of factors unique to the particular organization being analyzed. For example, Med Tech is small and struggling to compete in medical technology against larger organizations who are more established and have more money for research and development programs. Further, competitiors have started designing a product similar to theirs, and they are still waiting for FDA approval. Progressiveness, as a master symbol, expresses the urgency of the need to move ahead quickly; stories abound in high technoloy industry about small companies "going under over night." J-Systems lost money for the first time during the recession three years ago. The recession, as a negative value, was mentioned thirty-five times in their Annual Report. A new president has been hired; one who is dedicated to "waking this sleeping giant." This organization placed the highest value on productivity and increased profits.

It is important, then, to remember the complexity of causal relationships, and recognize that each variable or factor can have a reciprocal effect on organizations. The challenge is in achieving some understanding about the underlying complexity to illuminate the differences that occur in the symbology.

Though the evidence above suggests that some differences did emerge, it appears that more similarities than differences of shared symbols exist among organizations in high technology industry. Since this is an exploratory and not a comparative

study, it might be argued, however, that the primary values that emerged in the data analysis, would emerge as primary values in the study of many organizations, regardles of technology.

There is perhaps, little defense for the argument as it relates to equality, quality and teamwork. First, social emphasis has been placed on the Equal Employee Opportunity programs in the last few years. One might presume that management, in any organizational environment, would make claims about the value of equality, particularly as it relates to hiring and promoting people without regard to race, sex or creed. All of the organizations in this study stated such a commitment. Second, it might be argued that quality is a necesary requisite for any organization competing for success in the free enterprise system. There might be rare instances where demand so exceeds supply that this is not the case, but generally an organization, whether product or service oriented, must place a high value on quality if it is to succeed. Finally, teamwork may be a common symbol that would emerge across technologies, since the concept of cooperative action is so deeply ingrained in the principles of our American culture.

The analysis of the data appears to offer more evidence to support some tentative claims that innovativeness and individualism are primary values that express the unique aspects of high technology organizations. The ability to introduce something new, to take one of those unlimited ideas and make a change in the status quo, is important in an industry that has become

highly competitive. Organizations must compete to attract the "cream of the crop"; bright, imaginative people, who must not only be creative, but capable of creative action. Management, in high technology industry, apparently understands the need to socialize new members so that they come to appreciate innovating as an expected behavior that is required for individual and organizational success.

Innovation serves collective goals but is enacted by the independent thought and action of individuals. In high technology industry, these individuals have special knowledge of their tasks, knowledge that is not always shared by all of the organizational members. Decentralization as it relates to decision-making, appears to be an important factor in the organizations in this study. Claims were made by several interviewees about the high degree of autonomy within divisional units. Autonomy is a distinction one finds in a turbulent environment, where problems and requirements for action must continually be redefined according to the immediate and often rapidly occurring changes that are necessary when conditions are unstable.[33] This describes an important characteristic of high technology organizations and makes an implicit claim about what behaviors are desired and acceptable in this particular environment. Management, in this study, appears to use individualism as a symbol to communicate to new members the kind of behavior that is most valuable to the organizations.

Conclusion

This exploratory study has looked at nine high technology organizations and described the symbology that was exhibited in the discourse produced by management for the formal socialization process. Similarities and differences in the symboling among organizations were discussed. The analysis identified five primary values: innovativeness, quality, teamwork, equality and individualism. Examples were selected from the data to illustrate how these values emerged in the discourse and how they were supported by themes, master symbols, linguistic and material symbols.

Of the five values, innovativeness and individualsim appeared to be the primary values that were consistently and frequently associated with organizational claims that expressed management's aspirations and stated beliefs about the organizations. A study with a broader and more sufficient data base could confirm this tentative conclusion. Such a study might discover if clusters of similar values appeared in organizations engaged in similar technology. Some researchers argue that values do not appear alone, but in "value systems" which represent a set of descriptive, evaluative, or prescriptive beliefs.[34] Future research is needed, however, to determine if, in different technologies, discrete value systems emerge that characterize the unique specialization of a particular technology.

Another potential area for future research evolved from one of the questions that I asked each interviewee: What kind of a

formal orientation program do you have in your organization? Theorists indicate that this is a key communicative activity and an important part of the socialization process.[35] In this study that does not appear to be the case. In most instances, the orientation program consists of signing up for benefits and insurance, and acquiring name badges. Only one organization claimed to have an extensive, directed, formal orientation program. Most of the interviewees said that the orientation of new members was accomplished, informally, in on-the-job-training. It may be that in a turbulent environment, characterized by rapid change and growth and specialization of tasks, the principles that usually apply in traditional orientation programs do not fit the characteristics of the people who are being trained, and the behavior that is to be influenced. If so, the literature is outdated, because it doesn't apply to high technology industry.

Notes

[1] John Van Maanen and Edgar H. Schein, "Towards a Theory of Organizational Socialization," Research in Organizational Behavior, 1 (1979), 209-263.

[2] See Edgar H. Schein, "Organization Socialization and the Profession of Management," paper presented at the Douglas McGregor Memorial Lecture, Massachusetts Institute of Technology, Boston, 1967. Also, Meryl Reis Louis, "Surprise and Sense Making: What Newcomers Experience in Entering Unfamiliar Organizational Settings," Administrative Science Quarterly, 25 (1980), 226-251.

[3] Notable exceptions include Bruce Buchanan, II, "Building Organizational Commitment: The Socialization of Managers in Work Organization," Administrative Science Quarterly, 19 (1974), 533-546; Allan D. Meyer, "How Ideologies Supplant Formal Structures and Shape Responses to Environment," Journal of Management Studies, 19 (1982), 45-62; and Gary L. Kreps "Using Interpretive Research: The Development of a Socialization Program at RCA," in Communication and Organizations: An Interpetive Approach, Ed. Linda L. Putnam and Michael E. Pacanowsky, (Beverly Hills: Sage Publications, 1983), PP. 242-256.

[4] Daniel Katz, Robert L. Kahn and J. Adam Stacey, The Study of Organizations, (San Francisco: Jossey-Bass, 1980).

[5] Lee T. Burns and G. M. Stalker, The Management of Innovation, (London: Tavistock, 1961). Their research of manufacturing companies in Scotland and England led to the development of the organic metaphor. Also, Karl E. Weick describes organizations using a systems metaphor in The Social Psychology of Organizing, 2nd edition (Reading, Mass: Addison-Wesley, 1969).

[6] Linda Smircich, "Concepts of Culture and Organization Analysis," Administrative Science Quarterly. 28 (1983), 339-358,

[7] Smircich, p. 350.

[8] Thomas J. Peters, "Symbols, Patterns and Settings: An Optimistic Case for Getting Things Done," Organizational Dynamics, 9 (1978), 3-28.

[9] John Wilson, Introduction to social Movements, (New York: Basic Books, 1973).

[10] David H. Smith, "The Master Symbol as a Key to Understanding Organizational Communication." Unpublished and undated paper. Author in possession of paper.

[11] A. J. Sykes, "Myths in Communication," Journal of Communication, 20 (1970), 17-31.

[12] Don Faules, "The Use of Multi-Methods in the Organizational Setting," Western Journal of Speech Communication. 46 (1982), 115-130.

[13] Michael E. Pacanowsky and Nick O'Donnell-Trujillo, "Communication and Organizational cultures," The Western Journal of Speech Communication, 46 (1982), 115-130.

[14] Thomas Dandridge, Ian Mitroff and William Joyce, "Organization Symbolism: a Topic to Expand Organizational Analysis," Academy of Management Review, 5 (1980), 77-82.

[15] Katz, Kahn and Stacey, p. 72.

[16] Louis, p. 233.

[17] Louis, pp. 231-232

[18] A. C. Brown, Techniques of Persuasion, (Baltimore: Penquin Books, 1963).

[19] Peters, p. 6.

[20] Terrence E. Deal and Allan A. Kennedy, Corporate Cultures, (Reading, Mass: Addison-Wesley, 1982).

[21] Smith, p. 6.

[22] Bonnie McDaniel Johnson, Communication: The Process of Organizing, (Boston: Allyn and Bacon, Inc.).

[23] Charles R. Bantz, "Naturalistic Research Traditions," in Communicaion and Organizations: An Interpretive Approach, ed. Linda L. Putnam and Michael E. Pacanowsky, (Beverly Hills: Sage, 1983), pp. 55-71.

[24] Don F. Faules and Dennis C. Alexander, "Communication and Social Behavior: A Symbolic Interaction Perspective, (Reading, Mass: Addison-Wesley, 1978).

[25] Van Maanen and Schein, p. 212.

[26] Smith, p. 8.

[27] Richard Weaver, "Ultimate Terms in Contemporary Rhetoric," Ethics of Rhetoric, (Chicago: Regnery, 1952), pp. 216-232.

[28] Richard D. Rieke and Malcolm O. Sillars, Argumentation and the Decision Making Process, (Glenview, Illinois: Scott Foresman and Company, 1984). The authors claim that a person(s) may use another person's credibility as a basis for his argument. In this instance, the use of employees' credibility may tend to have a more persuasive influence on new recruits than if managememt made similar claims.

[29] Faules and Alexander, p. 252.

[30] Jeffrey Pfeiffer, "Management as Symbolic Action: The Creation and Maintenance of Organizational Paradigms," Research in Organizational Behavior, 3 (1981), 1-51.

[31] J. Galbraith, The Design of Comples Organizations, (Reading, Mass: Addison-Wesley, 1973).

[32] Milton Rokeach, Beliefs, Attitudes and Values, (San Francisco: Jossey-Bass, 1972).

[33] T. Burns and G. M. Stalker, The Management of Innovation, (London: Tavistock, 1961).

[34] Rokeach, p. 113.

[35] Schien, pp. 6-7.